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SEVERE HÆMORRHAGES FROM THE NOSE,

BY

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Severe Hæmorrhages From the Nose.[1]

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Most hæmorrhages from the nose originate from the anterior half of the septum, especially from the lower and middle portion of its cartilaginous part, while bleedings from other parts of the nose are much less frequent. The lower turbinated body and the posterior part of the septum are but seldom mentioned by authorities. The middle turbinated bone is, exceptionally, the source of hæmorrhage.

As I have had occasion to observe some extremely severe hæmorrhages from the middle turbinated, I shall give you the details below. From the start, I wish to say, that they are sometimes so violent in character, that the life of the patient becomes imperilled in a short time.

The first case was as severe as I had ever witnessed, and, I hope, never again to meet one of similar severity. It was, in fact, the most severe case of hæmorrhage of the nose of which I had ever heard. This is, in short, its history:

Four years ago, a Mrs. G., native of England, 38 years of age, was sent to me by her family physician. She had been treated by him for diabetes, and she now experienced some trouble in the nose and throat. A few years before, she had been laparotomised, and at the place of the cicatrization, a hernia had developed. I found in the generally healthy looking woman an hypertrophic rhinitis, post nasal catarrh, and a large hyperplasia of the tonsil of the tongue. I decided to cauterize the turbinated bodies, and so informed the patient, assuring her that there was no danger of hæmorrhage. I therefore, used the galvano-cautery on the left middle turbinated body, in a careful manner. When, a few minutes later, the lady rose from the chair to go home, a mass of blood rushed from the nose, as if suddenly a large artery had been cut. The blood flowed from her

[1]Read before the Clinical Society, January 6th, 1894.

nose and mouth, and all my endeavors to tampon the anterior nares were in vain. Post nasal plugging, tried afterwards, if anything, only increased the alarming flood. The loss of blood was so great, that I seriously feared the woman would expire any moment of acute anæmia. At the same time, I dared not leave my place and call for assistance, for fear she might fall from the chair. Finally, the bleeding ceased to that degree that only a small quantity ran from the left nostril. I rose quickly and fetched iodoform gauze. Afterwards, while removing the cotton from the nostril, I succeeded in catching a hurried glance of the left middle turbinated body, out of which an enormous quantity of blood rushed. However, after a short time, I succeeded in stopping the hæmorrhage by firmly inserting a piece of iodoform gauze from the anterior nares.

This epistaxis was so profuse that not alone the outer garments of the lady and my own were saturated with blood, but also a pool of blood lay on the floor. As the patient persisted, I sent her home in a carriage. Ten hours later, the bleeding had stopped, and the tampon was removed, but, as a matter of precaution, it was replaced by a new one. Next morning, renewed hæmorrhage, which, in my absence, was stopped by a physician, living in the neighborhood (Ferr. sesquichl. Ergot). During the evening of the same day, I removed the tampon, which had a disagreeable odor. The patient, complaining of a very bad taste and smell, I syringed her nose daily with a slight solution of permanganate of potash, without the re-occurrence of severe hæmorrhage. However, at intervals of four to five days, three more hæmorrhages occurred, while the patient was resting quietly in bed. These were by no means so alarming as the first one. No local cause was apparent.

The woman was no bleeder, as she had been successfully laparotomised by Dr. Gerster, a few years ago. As the septum and its adjacent parts had not been wounded in the least by the slight galvano-cauterization performed by me, I was convinced that the principal bleeding came only from the spot, which had been touched by the galvano-cautery, i. e., from the middle turbinated body. So, this case cannot be clearly explained.

It is a known fact, that patients with diabetes and the resulting diathesis are predisposed to hæmorrhages. One cannot, however, hold Mrs. G.'s diabetes responsible for such a tre-

mendous bleeding, following such a very mild treatment. And I should not like to have this case cited as opposing the use of the galvano-cautery in diabetic cases, as I have before and since repeatedly done so, without any hæmorrhage following.

In the practice of every specialist, such an accident may occur, but, as yet, we do not know the reason.

Incidentally, I might mention, that this case proved very disagreeable in another direction, and I simply wish the following sentence to serve as a warning to my colleagues, who might, at some time, be similarly served.

I treated the woman for several weeks on account of her subsequent anæmia, and when she finally reached her *statusquo ante* I sent her my bill. She answered it by a suit for damages, on account of malpractice for $10,000. Some one of her friends had told her the physician ought to have foreseen and avoided such a hæmorrhage. Happily, the difficulty ended by the suit being thrown out of court.

The two other severe cases of hæmorrhage which follow were cases of *vicarious menstruation.* This is the form of epistaxis, which takes the place of a menstrual flow in women, or for any periodical hæmorrhoidal bleeding. Perhaps, some or most of you have seen such cases, but, as a rule, they are not frequently met with. Their explanation requires our careful consideration, as, according to Schroeder, such regular vicarious bleedings may occur even in man. Besides, the two cases following are exceptionally severe, and this is another cause, why we report them.

The first case, a woman, where the diagnosis of a vicarious menstruation was beyond doubt. She was 46 years of age, and had not menstruated in a year. For seven months, she had nose bleedings regularly at the time of her menstruation. On the 21st of December, 1892, this first occurred, but she attached no importance to it, as the bleeding was slight, continued but a few days, and then stopped spontaneously. This re-occurred on the 20th of January and on the 22nd of February, 1893. She could not definitely remember about the month of March, but thought she bled slightly from the nose. On the 23rd of April, she awoke with a dreadful headache, and towards evening she had such a severe hæmorrhage from the nose, that she was obliged to call her physician. He succeeded in stopping the

bleeding almost entirely, and in the evening of the next day, it ceased. On the 22nd of May, the same thing was repeated, with the exception that the physician had to apply different styptics, before the bleeding stopped. On the 20th of June, she had, without any preliminary symptoms, a hæmorrhage which was more severe than any of the preceding. Three physicians attended her, and plugged the post nares by means of Bellocq's canula. Nevertheless, the bleeding did not cease, and the woman gradually grew weaker. She refused to go to bed, for fear of increased bleeding, but sat fully twenty-four hours upright in her chair. During that time, different attempts had been made to stop the epistaxis, but in vain.

When I arrived, she was reclining in the chair, supported by two women. She was deathly pale, and the pulse could hardly be felt. I thought of transfusion of a physiological salt solution, but decided at once to make another attempt to stop the bleeding, which seemed to me the indicatio vitalis. I had the woman placed upright in the chair, her head being held by my assistant. Then, very cautiously I removed the gauze from the pharynx and nose. During this time, the patient had to be constantly stimulated. I observed that the principal bleeding originated from the posterior lateral portion of the middle turbinated body. From this source of the bleeding, it appeared to me that the post nasal plugging as done by the physicians before I arrived, was partly justifiable. In the generality of cases, I do not approve of plugging from behind, and I, therefore, determined, as in my usual custom, to plug from in front.

At first, the bleeding was so profuse, that the patient fainted several times. At last, I inserted a firm tampon so far back that it caused a strong pressure upon the bleeding vessel, and almost immediately, the bleeding stopped. Three weeks later, I saw the patient in my office, and after a careful examination, found nothing abnormal in her nose except slight exostosis on the right side. This proves that the bleeding did not depend upon a local cause in the nose. The woman had slight hæmorrhages in July and August, and has since completely recovered.

The second of such cases was a woman, 49 years of age, in the menopause. For the last two months before I attended

her, corresponding to the menstrual period, she had nose bleeding. The third month it was so severe, that she consulted a physician, who treated her for eight days. I was called in consultation and I found a very anæmic and extremely nervous woman. She could not be induced to sit up, but was lying on a bed, resting on her side, in a small, badly lighted bedroom, continuously spitting small quantities of blood. Finally, by serious threats, I induced her to sit up in her bed. The bleeding was thereby increased, but it served my purpose, as I could thus insert a firm tampon of iodoform gauze towards the one visible bleeding spot at the anterior border of the middle turbinated body. In a short time, I stopped the hæmorrhage. For an hour, bleeding ceased entirely, when, suddenly, the patient began to spit blood again. As there was no blood running from the anterior nares, it was evident that another vessel further back had begun to bleed. I, therefore, removed the tampon, but no individual point of bleeding could be detected, as the blood poured from all parts. Then, under great difficulties, accompanied by a great loss of blood, I put in a new one as far back as possible. This time, I brought the epistaxis to a complete and final stoppage. The woman had, in the next month and in each of the two months following, nasal hæmorrhages which were slight in character. And although she seemed to recover from these attacks, she died lately of general debility.

There is another class of hæmorrhages from the nose, which I should like to mention this evening. They are not so severe, but much more frequent, originating from the anterior part of the septum and caused by dryness in the nasal mucosa. Suppose we have a patient with enlarged turbinated bodies, or the like, in whom breathing through the nose is impeded, if the occlusion be in the posterior portion of the nasal cavity, the anterior parts will become dry, because the secretion dries on the surface of the mucous membrane. The patient will try to get rid of the sensation caused therefrom, by boring with the finger, or the like. The consequence will be that the mucosa is eroded, and bleeding sets in. Or, we have a case of rhinitis sicca, with or without formation of crusts. Here, the irritation from dryness will be increased, and the desire to remove the crusts will become much more urgent.

In such cases,a bleeding occurs much more frequently,and if you do nothing else but cauterize the bleeding vessel, according to Kiesselbach and others, you will for the moment stop the hæmorrhage, but the dryness of the mucous membrane and the fragility of the blood vessel will increase still more. Very soon, at a neighboring or at the same spot, a vessel will rupture, causing a new epistaxis. Such cases I have seen relatively often. Only two months ago, a gentleman came to me, who had been repeatedly galvano-cauterized in the anterior region of the septum described by Kiesselbach. As the bleeding did not stop, but returned again and again, he consulted another physician, who treated him in quite the same manner. There was no improvement, and finally the patient became so weak by the permanent loss of blood, that he had to be brought in a carriage to my office. I found a generally dry condition of the mucous membrane, with abundant formation of crusts and scabs. They adhered so tightly to the mucosa, that the most careful attempts to remove them caused a fresh hæmorrhage. On the anterior part of the cartilaginous septum was a bleeding vessel. I did nothing else but stop the bleeding by simple tamponing with a pledget of cotton, and then soften the crusts. The next day, I saw how fragile the mucosa was and that any attempt, be it ever so delicate, to cauterize it, would make it still more dry and fragile. I went on with my treatment of softening and removing the crusts, day by day, with the satisfaction, that the patient had only few more slight bleedings, which stopped shortly and then entirely. Afterwards, I treated his rhinitis sicca.

But, gentlemen, what becomes of those cases, when the bleeding is but small, and the patients are not treated at all? The patients keep on boring with the finger, and gradually out of an erosion, an ulcer develops, which finally ends in that condition, which was called by Voltolini "Ulcus septum nasi perforans."

Allow me to cite three cases, which correspond to the three stages described by Hajek.

Case 1. Woman aet. 32 years, was sent to the German Poliklinik, on account of bleeding from the nose, which had lasted several weeks. At the rhinoscopic examination, we found on the right side of the cartilago-quadrangularis, at its

anterior portion, a grayish white discolorization of the superficial layer of the mucosa and partial superficial ulceration. The surrounding parts of the ulcer were much swollen and injected. The ulcer, therefore, was, according to Hajek, in the first stage. Neither Syphilis nor Tuberculosis were to be found.

Case 2. Was a woman, 60 years of age, who, during the two to three previous years, had suffered from occlusion of the nose. She was then treated by a physician and her condition improved. This year, a return of the same complaint occurred. Inability to breathe through the nose to so great a degree that she cannot sleep at night, dryness in the mouth, etc. Her condition objectively is such, as you see perhaps very seldom. I cannot remember having found it in literature. On the left side of the cartilaginous septum, at its anterior part, you see a pretty deep excavation, in which you could place the tip of the little finger. This excavation is lined by a very thin mucous membrane, on which you can plainly see cicatrices. The surroundings appear normal. However there is no atrophy of the other parts of the mucosa to be seen. There are, besides, hypertrophies of the turbinated bodies and other anomalies present, which do not pertain to my subject. Being questioned, the woman admits, that formerly she used to bore her fingers into her nostril, especially when she first had the occlusion in the nose. Therefore we conclude, that she had thus produced an ulcer, but, after the impediment in breathing was removed, most likely, the result of the treatment, the irration ceased and the ulceration healed. So, this is an exceptional case of a traumatic ulceration of the cartilaginous septum, not coming to a perforation, but healing previously by cicatrisation. I am convinced, had she not resumed treatment, the renewed irritation would have been strong enough to produce a complete perforation. The woman looks ruddy and healthy and has neither syphilis nor tuberculosis.

Case 3. A carpenter, 65 years old, who, seven years ago, was taken with pains in the left supraorbital region, which soon became very violent. They ran along the entire left side of the nose and gradually spread over the whole left side of the face. The most pronounced pain was in the region of the canine fossa and at the ala nasi, as well as in the alveolar process of

the left superior maxilla. It is evidently a case of neuralgia of the infraorbital nerve. For these same complaints, patient went two years ago to the German Poliklinik. He was very nervous and excitable, and continually worked his finger into his nose, and this in such a comical manner, that one could not suppress laughter. He said: "It itches and beats and scratches constantly within this nose, so that I cannot sleep," and he cannot follow his vocation as carpenter.

Besides an hypertrophy of the left lower turbinated body and a slight dryness, nothing abnormal was found in his nose. The hypertrophy was cauterized, but without the slightest success, and the patient soon after disappeared. A year ago, he returned with exactly the same symptoms, to again disappear after a short time. This winter he returned for the third time with the new complaints of frequent nose bleeding and a dry sensation in the nose. When, on examination, I found a perfectly developed perforation of the cartilaginous septum, imagine my surprise. The perforation was oval and ran from the left lower to the right upper portion. The opening was larger on the left, than on the right side. The mucous membrane on the borders extremely thin and smooth, no fresh ulcerations. I asked myself where this perforation originated, and of course, thought of syphilis. Although absolutely no other symptoms existed, the patient got K. I. in large doses, without any result whatsoever. Inunctions led to the same negative success, and as there was no tuberculosis, we naturally came to the conclusion, that this was a genuine case of perforating ulcer of the septum.

Gentlemen, these last three cases do not strictly belong to our theme, but it is my intention to show you by them, that they are the initial stages leading to many a severe hæmorrhage.

Such a similar opinion was already expressed by Lefferts and Beverley Robinson. Beverley Robinson (N. Y. Medical Journal, Page 350, 1887. Note on a frequent cause of nasal hæmorrhage), in speaking of cases of a severe epistaxis, says, in the majority of instances, there was a more or less advanced stage of atrophic rhinitis evident. While I cannot quite agree with Robinson as to the *frequency* of these cases, I must emphatically say that they do occur, and I am utterly surprised to read

Bosworth's view on this subject, who says: "It is often stated that epistaxis is met with as the result of erosions, which occur in connection with the incrustations on the septum in atrophic rhinitis. *Neither* ulceration nor erosion ever occur, I think, in atrophic rhinitis, and furthermore, the incrustations, as a rule, do not form upon the septum."

My cases, together with those previously reported by others, will, I hope, disperse every doubt in this matter, to the majority of physicians.

Lefferts[1] describes as early as 1882, that condition afterwards called by Voltolini: "Ulcus septi nasi perforans," and recommends avoidance of the habit of boring with the finger and the prevention of the crust formation upon the abraded surface by vaseline. While I have noticed that the crust formation is mostly on the eroded or ulcerated spot, I have very frequently seen crust formations in all other parts of the nose too, a fact which Lefferts does not mention, and which makes me believe, that he did not mean to speak about atrophic rhinitis.

The treatment advocated in these cases is in accordance with the views as to the origin of the bleeding.

Robinson, who, like me, has seen such cases of atrophic rhinitis with their sequelae, condemns the use of the galvano-cautery. He says (loc. cit.) "Particularly would I refer in this connection (i. e. atrophic rhinitis) to the injurious effects of the galvano-cautery, which I have known to render a slight affection, lasting and very troublesome, by producing raw surfaces very difficult to heal in the subjects of this special form of nasal disease." Chiari and others, among them, Cresswell Baber, (in Burnett's System of Diseases of the Ear, Nose and Throat), only lately recommended the galvano-cautery, while Bosworth and others are in favor of nitrate of silver or chromic acid, without however referring to atrophic rhinitis at all.

We all know that most of these bleedings of traumatic origin are slight and stop spontaneously, but, that the above mentioned method of cauterization, whenever the epistaxis is a little more severe, is a wrong one, is so decidedly my conviction, that I have given up using it entirely for such cases, and I hope to come to better results without it. I go further and

[1]Geo. M. Lefferts: A Practical Point Concerning Epistaxis. Med. News, Vol. 40 1882, page 100.

say that in dry rhinitis, combined or not with crusts, this method of treatment is exactly contradicted. By a slight search, you will actually find a bleeding vessel on the septum. A very superficial examination will show any one the bleeding point. In the numerous cases, however, of this kind, which I have seen, there was absolutely no positive necessity to use the galvano-cautery, in order to stop bleeding, as a very simple tamponade suffices in most cases. The bleeding having once ceased, then treat the primary cause, i. e., the atrophic or hypertrophic condition of the nose, and you will prevent the return of it in all cases.

The other class of hæmorrhages has been seen quite seldom, although Shurly claims, (Epistaxis. The Medical Age, page 375, 1884), that as a vicarious menstrual flow, they are frequently met with. Furthermore, John Mackenzie, Elsberg, and especially Joal (Mont-Dore) have shown the genital origin of Epistaxis in some cases.

The last mentioned author especially tries to demonstrate, how, during adolescence, an engorgement of the corpora cavernosa of the nose takes place by sexual excitement of a physiological or pathological nature. A rupture of the capillaries and with this an epistaxis, can easily be the result of it. To prove this, he cites, among others, also very interesting cases of onanism.

One very interesting case had been previously reported by Obermeyer[1]. It was that of a servant girl, 24 years old, who had just recovered from typhoid fever, and was pregnant in the sixth month. She had her first menstruation when she was 15 years old, and never since, but instead, nose bleeding every four weeks, always lasting three days. She lost each time one ounce of blood, the bleeding occurring one to three times daily. She had severe pains in the limbs, became dizzy, and things appeared to swim around her, so that she was compelled to turn following the direction of the surrounding objects. She never became unconscious. Six weeks after her confinement, she again had nose bleeding, which, however, was slight and lasted from one to eight days.

[1]Otto Obermeyer: Ein Fall von menstruellem Nasenbluten. Virchow's Archiv. Bd. 54, page 435.

A few more interesting cases of vicarious menstruation have been reported by B. Frankel (v. Ziemssens Hand buch), which would take too long to enumerate to-night.

I am convinced, that such hæmorrhages of genital origin are more frequent, than we imagine. But, how very dangerous they might become, under certain circumstances, my cases give evident proof.

The treatment of these cases requires sometimes a physician's whole attention and self-control. It is evident, that by innumerable different ways, you can reach the desired result. Smaller hæmorrhages generally stop by themselves. In somewhat larger hæmorrhages, one should, if at all possible, try to find the bleeding vessel or vessels, and plug them directly, and according to my conviction, it does not matter as much, what kind of material you use for it, as, that really a firm pressure is exercised upon the bleeding vessel. I am sorry to say, that we are not always able to see the bleeding vessel, as a capillary bleeding coming from all parts prevents us from seeing anything but a rush or mass of blood. But, even in such cases, we very often succeed in discovering one or more bleeding spots.

Of late, again, bacon is suggested and to me it is plausible that it will answer our use nicely in some cases, as it is smooth and pliable. I have not as yet used it.

Henocque of Paris and Hinkel of Buffalo, have found that antipyrin has a decided hæmostatic effect by producing constriction of the vessels, as well as coagulation of the blood. You may give it in powder, in solution or incorporated with gauze. Injections of hot water are reported to give good results in such cases, and we have to mention the enthusiastic report of Geneuil[1], who "succeeded in checking epistaxis by means of injections of lemon-juice, after every kind of hæmostatic had failed." He proceeds as follows: "After washing the nostril with fresh water, with a glass urethral syringe, he injects as much freshly-squeezed lemon-juice as the syringe will hold. In one or two minutes, the blood ceases to flow. One injection is usually sufficient. Dujardin-Beaumetz reports a striking case in which the method of Geneuil was sufficiently effective to take the place of tamponing." In this connection, Dr. S. Marx of this

[1]According to Annual of the Universal Medical Sciences, 1890. Vol. IV D. 18.

city, reminded me of the fact, that one of the readiest, simplest and surest methods of checking a post-partum hæmorrhage, is to carry a pared lemon in the hand into the uterus and squeeze the juice into the uterine cavity.

Blisters over the liver, hot water as hot as one can stand it, injections of ice water, or with turpentine, turpentine internally, ice-compresses over the nose and a score of more remedies have been recommended, and each one may be good in certain cases, if it is at hand. But, in such an alarming epistaxis, which comes so entirely unexpectedly, that you cannot leave the patient alone for a moment, take the first piece of cloth or cotton and push it into the nose.

In hæmorrhages of the posterior parts of the turbinated bodies, the antero posterior plugging recommended a very short while ago by de Roaldes (Med. Rec., Oct. 14, 1893, p. 485) seems advantageous. The article appeared, however, after the above cases had disappeared. However this may be, the principal thing is, that one should *always* try to see the bleeding vessels and then push up one or more pledgets of cotton, till a firm pressure upon the bleeding vessel is exercised, and not, as Creswell Baber says, "until the front part of the cavity is filled up." This, I consider the most important of all the rules in recent and very severe bleedings, because dangerous hæmorrhages occur when least expected, and when we have nothing at our disposal except perhaps some cotton out of which a tampon is easily and quickly made.

Luckily, such terrible hæmorrhages as I described above, in the woman with Diabetes, are very rare.

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